

REMARKS

Claims 1-5, 7 and 24-25 are pending in the application.

In response to the objection of claims 4 and 5 as set forth on page 2 of the Final Office Action, Applicants have rectified the typographical errors pointed to by Examiner. The status identifier for claims 4 and 5 is maintained as "original" because claims 4 and 5 have not been amended during prosecution and remain as originally filed.

With respect to the claim rejections under 35 U.S.C. § 103, Applicants respectfully request reconsideration of the claim rejections. Applicants have filed a Notice of Appeal concurrently herewith to continue the previous appeal in this action. At the very minimum, claims 1 and 24 are clearly patentable and non-obvious over the combination of Fukada, Lou, Wolf and Hamada.

Examiner's rejections are clearly based on hindsight reasoning gleaned from the Applicants' specification, whereby Examiner simply picks and chooses among related disclosures in the prior art to arrive at the claimed inventions. In the first instance, Examiner's reliance on four separate references, combined with Examiner's assertions of "well known" structures or "non critical" dimensions or "routine experimentation", etc., to cure the obvious deficiencies of the cited references, provides a strong indication as to the impropriety of the obviousness rejections.

Indeed, none of the cited references even remotely relates to methods for providing STI (shallow trench isolation) structures that are adapted to prevent or mitigate hot carrier effects due to charge trapping for charge which traverses a channel of transistor adjacent an STI structure, much less preventing or mitigating hot carrier effects by virtue of, e.g., the relative position between a transistor channel and a nitride liner of an STI structure (i.e., no-overlapping regions of a nitride liner and an adjacent transistor channel).

Moreover, Examiner's grounds for obviousness fail to address the deficiencies of the cited references with respect to structures that prevent or mitigate hot carrier effects and essentially dismisses such claim limitations as being "functional". Applicants respectfully submit, however, the claim limitations regarding *the recessed nitride liner being dimensioned and configured to prevent hot carrier effects due to charge trapping for charge which traverses a*

channel of the transistor are not "functional" but rather structural characteristics provided by the dimension and configuration of the recessed nitride liner.

Even if such limitation is construed as a functional limitation, functional limitations are not improper and must be evaluated and considered because such limitations are acceptable when they serve to define structural attributes of interrelated components or set definite boundaries on patent protection sought (see MPEP 2173.05(g)). In the case at bar, the cited references, singularly or in any combination, fail to disclose or even remotely suggest the claim limitation of *a recessed nitride liner being dimensioned and configured to prevent hot carrier effects due to charge trapping for charge which traverses a channel of the transistor*, as essentially recited in claims 1 and 24.

Accordingly, withdrawal of the rejections is respectfully requested.

Respectfully submitted



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